

Office Memorandum • UNITED STATES GOVERNMENT

TO : The Files (Facsimile Security [redacted]) DATE: 4 November 1954 50X1

FROM : [redacted] STAT

SUBJECT: Test and Evaluation of the [redacted] Facsimile Cyphering Equipment, 50X1
Third Progress Report

- 1. This is the third progress report covering the subject tests. The report covers the period 23 November 1953 to date.
- 2. Activity during the reporting period can be broken down as follows:

A. 23 November 1953 - 18 January 1954: Routine tests were conducted on the Engineering Lab model of the [redacted] Tests were satisfactory and included use of both [redacted] Facsimile and the OCD Intellofax equipment. All established key positions as set up in the cryptographic aids operated satisfactorily after considerable re-working of the rotors and rotor baskets. 50X1 50X1

B. 18 January 1954 - 15 September 1954 - Further plans for tests on Engineering Lab model of the [redacted] were set aside in the interest of higher priority work. The engineer assigned to the tests was assigned temporarily to a [redacted] project. During this period the engineer concerned received training from NSA [redacted] theory, conducted a preliminary test and evaluation of the [redacted] equipment, and received further training in the theory of operation of the production engineering model of the [redacted] equipment. Also during this period, NSA engineers conducted a successful life test on the [redacted] 50X1 50X1 50X1 50X1 50X1 50X1 50X1

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Test and Evaluation of the [] Facsimile
Cyphering Equipment, Third Progress Report - Cont'd

4 November 1954

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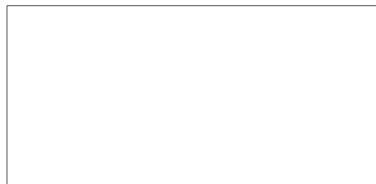
3. With reference to the end result of the subject tests, tentative systems' planning has included all electronic aspects of a secure facsimile communications network. The radiation potential of both the facsimile equipment and the [] is under consideration by the Agency and NSA. NSA expects to conduct a two year study of the problem with the assistance of a commercial contractor. Special adaptors are being made to allow use of the [] A contract is in process which calls for a study of band-compression techniques applicable to a facsimile communication system.

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4. Future plans for the subject tests include:

- A. A 60 day error free test recommended by NSA.
- B. Closely monitoring the NSA radiation investigations.
- C. Closely monitoring the band-compression study.
- D. A review of Agency requirements for facsimile applications.



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